Geriatric Rehabilitation

The Challenge and the Goal

DAVID RUBIN, *M.D., Ph.D.*, Los Angeles

• **A geriatric rehabilitation program at Mt. Sinai Rehabilitation Hospital in Los Angeles (which had been a custodial hospital) demonstrated the effectiveness of newer methods in rehabilitation in restoring chronically disabled elderly patients to a new level of physical, psychological and social performance.**

Efforts to restore morale in patients long resigned to invalidism, to make them want to live socially, to make them useful to themselves and others and to improve their physical condition brought gratifying and in some cases dramatic results.

THE MOST SERIOUS CHALLENGE currently facing medicine in Rusk's[2] view, is the increased incidence of both chronic diseases and chronic disability among the older segments of the population. In a recent report by a United States Senate Subcommittee on Problems of the Aged and Aging, Dr. Rusk is quoted as saying, "Rehabilitation of the chronically ill and chronically disabled is not just a series of restorative techniques—it is a philosophy of medical responsibility."

In the United States there are approximately 17,000,000 persons in the age group 65 and over. Of this number approximately 5 per cent are in institutions, mostly in long term facilities.[3] A recent study indicates that the proportions of the aged with one or more chronic conditions range from 74.7 per cent to 82.0 per cent, depending upon geographic location.[4]

In view of the proportionally large and increasing numbers of elderly disabled persons, medical programs of one kind or another have been developed and are being developed to meet the existing and rapidly expanding need. However, the problem of establishing adequate medical and rehabilitation services for the aged in the face of personnel shortage, lack of funds and the passive attitude which prevails on the part of some physicians and the community toward the disabled aged is a great one. As was stated in a report by a committee of the United States Senate,[1] "The ultimate value against which the several proposed approaches to the problem should be weighed involves not only the question of the soundest approach to financing medical care for the aged; it rests also on the increasing belief in the possibility of extending human life under conditions of dignity and creative activity, and using the best of modern medical science toward this end."

In this respect it is almost axiomatic that elderly, disabled patients who might otherwise be rehabilitated, at least to some degree, with good medical care, nursing care and rehabilitation services are allowed to vegetate and regress physically, emotionally and spiritually. With proper treatment and the newer knowledge now available it is estimated that 25 to 30 per cent of the elderly patients in institutions could be rehabilitated sufficiently to achieve a degree of independence consistent with return to their own homes or to a more socially desirable climate in a modern boarding home or rest home facility. That this is not a figment of the imagination or an idle dream has been demonstrated on a small scale at the Mount Sinai Rehabilitation Hospital in Los Angeles.

In January, 1961, an extensive reorganization* of the Eastside Mount Sinai Hospital or Custodial Care Home was initiated by action of the executive board of the Cedars of Lebanon-Mount Sinai Hospitals, a nonprofit, community-sponsored hospital in Los Angeles. Until the development of the new program the facility had served as a custodial and terminal care center with a 91-bed capacity. A review of the inpatient population at the outset of the new program revealed that almost all the patients were afflicted with one or more chronic ailments, but that some were ambulatory and essentially independent while others were bedridden and totally dependent. Between these two extremes were all the conceivable stages of dependency and chronic physical disability. In the absence of a true rehabilitation program all patients were potential long-term, rejected, elderly residents. A few patients had been "hospital residents" for over twenty years. It was against this background of long term, custodial,

From the Department of Physical Medicine, Mount Sinai Hospital and Mount Sinai Rehabilitation Hospital, Los Angeles.

Presented before the Section on Physical Medicine at the 91st Annual Session of the California Medical Association, April 15 to 18, 1962.

*The author wishes to acknowledge and to express his appreciation to Dr. Sidney Soll, associate medical director, Cedars-Sinai Hospital for his interest and guidance in establishing the rehabilitation program, and to Mr. Harold Bilsky, administrator, Mount Sinai Rehabilitation Hospital for his enthusiastic cooperation in the reorganization of the center.

resident care that the hospital administration sought to establish a rehabilitation program. The stated purpose of the program was to introduce the newest methods of rehabilitation medicine in an effort to restore or maintain every disabled person at the optimum level of attainable performance—physically, emotionally, socially and spiritually—so that he or she may return to a useful and meaningful place in society.

A GERIATRIC PROGRAM—ITS DEVELOPMENT

The problems inherent in reorganizing an existent, long-term custodial care facility into a semblance of a modern geriatric rehabilitation center were many. The need for converting patient and staff orientation from a static to a dynamic concept was imperative. The change was required at all levels of operation, inasmuch as a sedentary, nonproductive and little motivated population was about to embark on a program of movement and expanded interpersonal relationships.

As a first step toward improving patient morale and a sense of wellbeing, it was established that all wheel-chair and ambulatory patients must dress in street clothes on arising in the morning. Previously patients had remained in their night-clothes from morning to evening and were also fed in their rooms. The demoralizing effect upon the chronically disabled patient of remaining in night-clothes throughout the day is easily surmised. Simultaneously, the physical plant was being renovated to provide for specific areas—therapeutic, as well as dining, recreational, and social. It was predetermined that all areas should be bright, cheerful, well-equipped and available to the patients throughout the day.

The response to communal eating was at first resisted. Psychologically, the patients in many instances felt ill at ease after months and years of eating in seclusion, or, at best, with one or two other persons in the room. However, the embarrassment of eating in the company of three or four persons at the same table passed, and patients not originally included soon requested permission to eat in the newly established dining room. Once the resistance to group eating had been overcome, integration into social games and other group activities following the noon meal was a relatively simple matter. In keeping with the concept that activity overcomes depression and inertia, scheduled movies, picnics, parties and outings away from the center were organized. The many hospital auxiliaries and their volunteer workers aided in this effort. Once a favorable physical and social setting to bolster patient morale, interest and desire had been established, the stage was set for the heart of the project: medical rehabilitation.

From a medical rehabilitation standpoint every patient was examined both by the staff internist and the physiatrist. Following the examination a reasonable rehabilitation goal was established, and individual programs of physical and occupational therapy were outlined in the presence of the physical and occupational therapist, either at the bedside or in the therapy areas. In outlining the programs the emphasis was placed on functional improvement through muscle strengthening, restoration of joint mobility, and self-care training. The latter included all aspects of dressing, toileting, showering, bathing, feeding and, whenever possible, independent ambulation. Bedside and bathroom activities of daily living were carried out in the patients' rooms and bathrooms, at first by the occupational therapist and subsequently with the aid of previously trained ward personnel under the direct supervision of the therapist. This served to motivate the aids and attendants who had for years been engaged in dull, routine, never-changing daily chores. The favorable impact on the attendant-patient relationship was striking.

Periodically the patient was reevaluated, appropriate changes in therapy were made and goals were reassessed when necessary. Monthly staff conferences were held to review the progress of specific patients and to correlate the gathered information from the medical, administrative, nursing, therapy, social service and dietetic personnel. In this way a total picture of the patient, his problems, his response to therapy, and, ultimately, his placement was secured. Group participation meetings were organized in which the rehabilitation patients and staff personnel, including the nurses and attendants, took part. In this manner mutual problems are discussed and solved.

In the course of the first year of operation 56 patients were admitted to the rehabilitation unit, including 21 custodial patients selected from the existing hospital census at the initiation of the program.

RESULTS

The original group of 21 patients selected for the rehabilitation program ranged in age from 60 years to 82 years. There were 13 with hemiplegia, two with Parkinsonism, and one in each of the following diagnostic categories: fractured hip; rheumatoid arthritis; adult muscular dystrophy; paraplegia; combined asthma and emphysema; and unilateral amputation. From this group of so-called "custodial cases" a total of four patients were discharged (three returned to their homes and one was placed in a rest home). Despite the subsequent return to a custodial status of 11 patients, improve-

ment was evident in 15 of the 21 patients, and five became almost completely independent in self care. Ambulation enough to permit the patient's walking to the dining room was achieved in nine cases (in which previously the patients had been unable or unwilling to walk).

During the first 12 months of operation a total of 35 new patients, 16 women and 19 men, were admitted to the rehabilitation center, most of them in the last six months of 1961. The ages ranged from 59 to 81 years. Eighteen were hemiplegic, four had hip fractures, two collagen disease, and one each of the following: quadriplegia, traumatic hemiplegia, paraplegia, cerebral aneurysm with hemiplegia, asthma and emphysema, osteoarthritis, rheumatoid arthritis, cardiac disease, osteomyelitis with lower extremity weakness, tibial fracture, and above-knee amputation. These patients were immediately placed into a program of treatment with an anticipated and reasonable goal based on the initial evaluation. Of this group, 13 were returned to their homes—seven as partially independent and six as completely independent in self care. Six patients were sent to rest homes as partially independent but in need of continued part-time attendant care. Five patients were reclassified as custodial, and three died at the center. The remainder are being continued in the rehabilitation program. Seventeen of the 35 patients became ambulatory—eight without any form of support, eight with one cane, one with crutches.

Twenty-three patients (41 per cent) were discharged from the rehabilitation center in the one-year period. Considering only the second group of 35 patients, 54 per cent were discharged after three to nine months of intensive rehabilitation. Of the 56 patients treated during the first year, 42 were improved by the program.

The following two cases are typical of the improvement that was brought about.

REPORTS OF CASES

CASE 1. The patient was a 67-year-old man who was admitted as a direct transfer from the local county hospital. On April 27, 1961, he had fallen in the bathroom at a friend's home and struck his head on the bathtub rim and then on the floor. He apparently lost the ability to move his arms and legs but did not lose consciousness. On admission to the county hospital he was observed to be alert and oriented. There was a small laceration over the forehead and mild suboccipital tenderness of the neck. Both upper extremities were decidedly weak, more on the right side than on the left. Strength in both lower extremities was fair, but the right leg was weaker than the left. The rectal sphincter was under good control, but there was disturbed bladder function. Extensive hypalgesia to pin prick and hyperactive deep tendon reflexes were noted. X-ray films of the cervical spine, planograms of the odontoid process and myelographic examination on two occasions elicited no evidence of cervical spine disease. It was assumed that cerebrovascular thrombosis had occurred and the patient showed some improvement in the five weeks he was in hospital before transfer to the Mount Sinai Rehabilitation Hospital. The discharge note indicated that he appeared to improve but could not walk, despite good return of strength in the lower extremities, and could not use his upper extremities in any functional manner.

Upon admission to the center he was observed to be alert and responsive. He was helped to stand at the bedside where he showed a spastic standing posture. He had great difficulty in taking a few assisted steps. The patient had pronounced spasticity and weakness of the upper extremities and he could not use his hands functionally. The lower extremities were moderately spastic but strength and range of motion were fair when the patient was supine. The deep tendon reflexes were hyperactive throughout, and Babinski and Chaddock signs were present on both sides. Clonus was observed in both ankles, the left knee and the left wrist. Sensation was impaired below the level of the fifth thoracic nerve especially to pain and temperature. There was an indwelling Foley catheter. The impression gathered from the history and examination was that the patient had partial quadriparesis as the result of injury to the spinal cord, and that he may have had a cerebrovascular accident, leading to the fall and subsequent cervical trauma.

A program of physical and occupational therapy was begun immediately. In the course of six months the patient graduated from bed to wheel chair to independent ambulation. He developed good use of his right hand and fair use of the left hand (previously injured, with loss of three fingers). At first, spring suspension slings were used to initiate functional movement of the upper extremities and permit occupational therapy activities. As strength returned the patient was able to dispense with these devices and ultimately developed sufficient function to feed, shave, toilet, and partially dress and undress. At the time of discharge to his home he was independently ambulatory on uneven as well as level ground, and, except for inability to dress completely, was independent in self care. Morale and motivation continued at an excellent level throughout.

CASE 2. An 80-year-old man entered Mount Sinai Rehabilitation Hospital on May 3, 1961, with a

history of long-standing osteoarthritic involvement of the knees and shoulders. He had received excellent medical care for many years, including several courses of intra-articular steroid therapy. However, he had reached a period of diminishing return and, when no longer able to take care of his needs at home, applied for admission to the rehabilitation hospital.

The patient, who was of pleasant disposition, was able with great effort and obvious pain to take a few steps with a cane. Otherwise he kept to a wheel chair. Both knees were swollen and tender, with the range of motion, both active and passive, very limited and painful. Motion of the left shoulder also was painful and restricted. A review of recent x-ray films showed advanced hypertrophic, degenerative changes of both knee joints.

A program of intensive physical therapy, combined with intra-articular injection of large doses of steroids, was begun. The response was dramatic. In two weeks the patient could walk without aid, tenderness almost completely abated and there was pronounced increase in range of motion of the knee joints. On May 25, 1962, the patient was discharged and thereafter was an outpatient at the Mount Sinai Hospital Clinic. He received therapy twice weekly and occasionally required an intra-articular injection for transitory swelling and pain. He could drive an automobile and was fully ambulatory and independent in self care.

CONCLUSION

The dejected, and often rejected, resigned, disabled, so-called "custodial geriatric patient" who finds himself in a static and sedentary situation has little need for preserving his ego strength. He tends to withdraw and to avoid social contacts even with equally involved patients in his immediate environment. That this is not, in most instances, an irreversible process was demonstrated in our study. The challenge posed by this ever-expanding problem is a double-edged one: On one side is the challenge to the patient upon whom the dynamic forces converge to attempt to overcome the inertia, the depression, the loss of dignity and individual status; and on the other side is the challenge to the community and the rehabilitation staff, from physician to handyman, to provide the physical facilities and the medical acumen and knowledge needed to restore function, confidence and self-respect to the disabled, geriatric patient. Ideally the goal is the prevention of the loss of function, the preservation of human dignity and a sense of identity. Less than ideally, but at present the most practical approach, is the restoration or maintenance of every disabled, elderly person at the optimum level of physical performance, emotional equilibrium and social relationship compatible with his reservoir of potential strength in these areas. As demonstrated in this study, in a significant number of cases the early and vigorous treatment of physical disability in the elderly may make the difference between developing a long-term, custodial patient who is a drain on the community and of little use to himself, and a restored, functioning person who may return to his home and, in some instances, to a contributing status in the community.

10921 Wilshire Boulevard, Los Angeles 24.

REFERENCES

1. Action for the Aged and Aging; A Report of the Committee on Labor and Public Welfare of the United States Senate, p. 56 (March 1961).

2. Aging Americans, Their Views and Living Conditions; A Report by the Subcommittee on Problems of the Aged and Aging of the Committee on Labor and Public Welfare, United States Senate, p. 23 (Dec. 1960).

3. Aging in the States, National Advisory Committee for the 1961 White House Conference on Aging, p. 127 (Jan. 1961).

4. United States National Health Survey, Series C, Vol. 6, (July 1957-1959).